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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,719	04/24/2008	Tomonori Nakamura	2006_1567A	2831

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EXAMINER	
VAUGHAN, MICHAEL R	
ART UNIT	PAPER NUMBER
2431	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/593,719	NAKAMURA, TOMONORI	
	Examiner	Art Unit	
	MICHAEL R. VAUGHAN	2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The instant application having Application No. 10/593719 is presented for examination by the examiner. Claims 1 and 3-5 have been amended. Claim 2 has been canceled. Claims 1 and 3-5 remain pending.

Response to Amendment

Specification

The objection to the specification is withdrawn due to the current amendment.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase “judges whether or not the data is data that is necessary for” is indefinite. Examiner is interpreting this to mean "judges whether or not the data is necessary for".

Response to Arguments

Applicant's arguments filed 2/6/09 have been fully considered but they are not persuasive. Applicant has alleged that the prior art does not teach a two factor test in

determining whether or not data should be encrypted and what type of encryption is to be used. Examiner finds this argument moot because the limitations of the claim do not require this two factor test. Claim 1, has both an encryption judgment unit and an encryption method determination unit but they overlap in function and use the same test. The test for each is based on confidentiality information that corresponds to the class to which the method belongs. Therefore, Examiner only finds a single factor test because each component uses the same factor. The encryption judgment unit determines whether or not to perform encryption. The encryption method determination unit then determines the encryption method. The broadest reasonable interpretation of this limitation is that once the encryption is determined to be needed, the encryption method determination selects the method known by the device to carry out the encryption. In other words, the device inherently must know an encryption method. So once encryption is needed there is a determination to use said method. That Applicant seems to imply that a type of encryption is determined from a list of different encryption methods but the claim does not require this narrow interpretation. Even if one were to argue that the encryption method determination is different that the judgment, Torii teaches in paragraph 0062 a flag of confidentiality determines an encryption method.

In Applicant arguments, on page 9, he states that the previous Office Action acknowledges that Kershenbaum and Caronni fail to disclose or suggest that encryption of the data is based on the confidentiality information of amended independent claim 1. Examiner made no such statement for at least the reason that those references are the secondary references in the 103 rejection. They were brought in to teach limitations not

found in Torii but there was no mentioning that those references fail to teach the above said limitation.

Examiner would also like to point out that features of the preamble are intended use and are not given patentable weight. The invention is directed to a device and those features relate to a program which is intended to be executed by the device. However, the device need not possess those characteristics of the intended program. For the record, Examiner has shown that even if they were somehow given patentable weight they too are known in the art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torii et al. (US 2002/0184495 A1), hereinafter Torii, in view of Kershenbaum et al. (US 2002/0184486 A1), hereinafter Kershenbaum.

As per claim 1, Torii teaches the limitation of "an encryption judgment unit operable to judge whether or not encryption of data manipulated by a given one of the

methods is necessary, with reference to the confidentiality information that corresponds to the class to which the method belongs" (page 1, paragraph 0012) as necessity determination means for determining whether or not received data needs to be encrypted.

In addition, Torii teaches the limitations of "an object recording unit operable to, when the method is to be executed, record, in a memory, an object that includes the data that the method manipulates" (page 1, paragraph 0013) as encryption means for encrypting data which is determined as having to be encrypted, before being stored in a storage apparatus and "when the encryption judgment unit judges that encryption is necessary, the object recording unit records the object having included data that is encrypted according to the determined encryption method" (paragraph 0062);

In addition Torii teaches an encryption method determination unit operable to, based on the confidentiality information [confidential flag] that corresponds to the class to which the method belongs, determine an encryption method (0062).

It is noted, however, that Torii does not explicitly teach the limitation of "the application program including one or more classes that each have one or more methods, and confidentiality information that corresponds respectively to the classes and that expresses whether or not it is necessary for the corresponding class to be confidential." However, Kershenbaum teaches (page5, paragraph 0059) Java 2 allocates Permissions to classes, thus can allocate confidentiality information to classes by using structure of Object Oriented program code. It would have been obvious to one of the ordinary skill in the art at the time of the invention to incorporate teachings of

Kershenbaum into the system of Torii because it would better indicate which types of data need to be encrypted by providing a relate particular data to the inherent method/class structure of object orientated programs languages. In other orders the system could decide if data needs to be encrypted by the permission of the class.

As per claim 3, it is inherent that this limitation would take place if the data that was once encrypted and passed the test for needing encryption, needs to be updated, it would still be determined as needing encryption.

As per claim 4, Torii teaches the limitation of "the object recorded in the memory includes information showing whether or not the data in the object is encrypted, and when the information shows that data in the object is encrypted, the data is recorded encrypted" (page 4, paragraphs 0069 and 0071) as the NIC determines whether the received data already is in an encrypted form. The determination of whether or not the data is in encrypted form is made possible by determining whether or not the data is marked with an encryption flag.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Torii et al. (US 2002/0184495 A1) in view of Kershenbaum et al. (US 2002/0184486 A1) as applied to claim 1, and further in view of Caronni et al. (US 20030133574 A1).

With respect to claim 5, it is noted that neither Torii nor Kershenbaum teach the limitation of "a data judgment unit operable to judge whether or not the data is data necessary for specifying an address location of other data, wherein when the data

judgment unit judges that the data is data necessary for specifying an address location of other data, encryption is suppressed."

Torii teaches determining where the data will reside in memory (0043). On the other hand, Caronni teaches the above motioned limitation (page 2, paragraph 0029) as Memory Management Unit (MMU) associates key tags with particular memory regions so that every time MMU retrieves a map between a virtual memory address and physical memory address, a corresponding key tag is accessed. The key tag may indicate that the instruction(s) or data at the physical memory address are unencrypted and should be processed in the clear (e.g., without encryption or decryption).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to incorporate teachings of Caronni into the system of Torii and Kershenbaum to reduce the overhead on the processing unit by not requiring decrypting the address information for every data transfer and thus improving the efficiency of the system.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. VAUGHAN whose telephone number is (571)270-7316. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R. V./

Examiner, Art Unit 2431

/Ayaz R. Sheikh/

Supervisory Patent Examiner, Art Unit 2431